

ABSTRACT OF THE DISCLOSURE

Network load is reduced by combining packets by considering the MTU of a transmission path. When a routing processing unit detects the transmission of a large number of packets addressed to the same destination network, a routing information gathering unit determines the MTU of a transmission path along which the packets are to be transmitted. A combining unit assembles a combined packet by combining packets up to a length that does not exceed the MTU of the transmission path, and sends out the combined packet.